Jane's Defence Weekly
May 22, 2002

USA Looks To Enhance Sea-Basing Capabilities

By Andrew Koch, JDW Bureau Chief, Washington DC

During Operation 'Enduring Freedom' in Afghanistan, US forces did not enjoy immediate and ready access to regional bases, a problem the Department of Defense (DoD) had been expecting but did not have the full capability to address.

To counter such difficulties in the future, the US Navy and US Marine Corps (USMC) are developing a new "enhanced sea- basing concept" to improve their ability to project power. The concept calls for the ability to send USMC combat forces anywhere in the world quickly using integrated logistics ships that would be part of the 'networked navy' of the future.

While existing sea-basing capabilities do provide mobility, they require ports and airfields to offload their goods, making US forces potentially vulnerable, said Col Art Corbett, Director of Warfighting Requirements at the Marine Corps Combat Development Command. The combination of this vulnerability, particularly to asymmetric attacks such as ballistic or cruise missiles, with the expectation that future ashore basing rights could be limited is helping to push the enhanced sea-basing concept.

The concept will use new Maritime Prepositioning Force (Future) (MPF(F)) ships capable of at-sea arrival and assembly of units, selective off-loading of only equipment that is needed, and at-sea reconstitution and redeployment. However, Col Corbett added, "this is not just new types of equipment, the concepts of how we conduct expeditionary warfare are going to change."

One idea being explored is to have MPF(F) ships forward deployed that could, in a crisis, link up troops and equipment at sea. The troops would be flown to forward air stations such as at Guam or Rota, Spain,

Col Corbett said, and then be ferried by high-speed vessels (HSVs) to the at-sea bases. Another option would be to deploy the forces via V-22 Osprey tilt-rotor aircraft or helicopters that could land on the MPF(F). The HSVs could then be loaded with marines and equipment to ferry them ashore.

Such a concept would help move more troops forward faster, Col Corbett added, explaining they would also increase the speed at which equipment could be moved from ships ashore and would help minimise the amount of logistical support needed on land.

A new MPF ship is needed because the current vessels are under lease from commercial organisations and those contracts are set to expire between 2009 and 2011. To replace them, the MPF(F) programme is about to begin a formal analysis of alternatives (AoA) in the next few months to determine what that future ship class will need and how many will be required. Col Corbett noted there are currently three squadrons of MPF ships - totalling 13 vessels. The "working assumption" for MPF(F) is that the same amount of squadrons will be needed, each able to move a Marine Expeditionary Brigade anywhere in the world.

To experiment with the concept, the navy is looking at using a prototype such as a converted large, medium-speed roll-on/roll-off (LMSR) ship. A modified LMSR is one low-cost option for the MPF(F), along with others including upgrades to existing MPF ships, or converting other navy vessels.

Before 2010, the navy is considering whether to buy out the existing MPF ship lease, said Lt Col Juan Figueroa, an MPF requirements official on the navy staff. If those ships are bought, they would be transferred to the reserve fleet once the MPF(F) enters service, expected to begin about 2010. As a complementary asset, the navy is looking at options to acquire a single specialised platform to base special operations forces called an Afloat Forward Staging Base.

Options for the mission, such as conducted from the USS Kitty Hawk in the Afghan operations, include reactivation of a decommissioned aircraft carrier, a modified LMSR, conversion of a commercial vessel such as a supertanker or container ship, or modification of an LPD-17 amphibious transport dock ship (Jane's Defence Weekly 18 January).

Several preliminary designs and concepts are being explored and existing commercial hulls offer the lowest-cost option.